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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification $\hat{6}$: WO 96/34885 (11) International Publication Number: C07K 14/47, 14/575, A61K 38/17, 38/22 A3 (43) International Publication Date: 7 November 1996 (07.11.96) PCT/GB96/01094 (81) Designated States: JP, US, European patent (AT, BE, CH, DE, (21) International Application Number:

(30) Priority Data:

(22) International Filing Date:

9509164.1

5 May 1995 (05.05.95) GB

7 May 1996 (07.05.96)

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DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published

With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(88) Date of publication of the international search report: 9 May 1997 (09.05.97)

(54) Title: BIOLOGICALLY ACTIVE PEPTIDE FRAGMENTS OF OB PROTEIN

(57) Abstract

The present invention provides a protein fragment of the ob protein, being an active site of said protein. The active site is suitably provided by the ob protein when it is in the form of a four helix bundle structure, particularly that having an up-up down-down topology. In particular, the active site is formed from one or more amino acids selected from one or more of the four helices forming the secondary structure of the ob protein, especially a protein fragment consisting of amino acid residues 26 to 39, 74 to 88, 93 to 113 or 142 to 161. The compounds of the invention are considered to be capable of regulating the physiological activity of the ob protein and are therefor of potential use in the treatment of nutritional and metabollic disorders, particularly obesity and diabetes in the case of agonists and anorexia and cachexia in the case of antagonists.

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INTERNATIONAL SEARCH REPORT

Inter mal Application No PC1/GB 96/01094

A. CLASSIFICATION OF SUBJECT MATTER IPC 6 C07K14/47 C07K14 A61K38/17 A61K38/22 CO7K14/575 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 6 C07K A61K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category * 1-4 Ε WO 96 23815 A (LILLY CO ELI ; HEATH WILLIAM F JR (US); MANETTA JOSEPH V (US); SHIE) 8 August 1996 see SeqID no's. 2, 5 see claims; examples Ε WO 96 23514 A (LILLY CO ELI ; BASINSKI 1-4,8-10 MARGRET B (US); DIMARCHI RICHARD D (US); FL) 8 August 1996 see claims; examples P,X WO 96 05309 A (UNIV ROCKEFELLER ; FRIEDMAN 1-4.8-10 JEFFREY M (US); ZHANG YIYING (US); PROE) 22 February 1996 see page 36, line 18 - page 40, line 10; claims; examples Patent family members are listed in annex. Further documents are listed in the continuation of box C. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but *A* document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the nogasyaı 'E' earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docucitation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled other means document published prior to the international filing date but later than the priority date claimed '&' document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 24 March 1997 07.04.97 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Ripwijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fuhr, C Fax (+31-70) 340-3016

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